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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,488	03/29/2004	Jun Yoshida	107337-00058	8887

4372 7590 08/09/2005
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EXAMINER

NGUYEN, DILINH P

ART UNIT	PAPER NUMBER
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2814

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/811,488	YOSHIDA ET AL.	
	Examiner	Art Unit	
	DiLinh Nguyen.	2814	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/29/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Takizawa (U.S. Pat. 6339234).

Takizawa discloses a semiconductor device comprising:

a first power line 5 connected to a bypass capacitor 7b;

a second power line 6 from which a part corresponding to a position of said bypass capacitor is removed; and

a contact (5a, 5b, 6a or 6b) for connecting said first power line and said second power line (figs. 5A-6B, column 8, lines 32-36).

- Regarding claim 2, Takizawa discloses that a plurality of said contacts is provided [5a, 5b, 6a and 6b] (fig. 5a).
- Regarding claim 5, Takizawa discloses that the bypass capacitor is installed close to a circuit 8 which is supplied with power (fig. 5b, column 8, line 36).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3 and 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takizawa (U.S. Pat. 6339234) in view of AAPA (figs. 3-4).

- Regarding claims 3 and 5-6, Takizawa substantially discloses all the limitations as claimed above except for the contact is attached to an end of the second power line and an I/O cell installed around a semiconductor tip.

However, AAPA (fig. 3) discloses that the contact 104 is attached to an end of said the second power line 105 (fig. 5a) and the bypass capacitor 101 is installed close to a circuit 114 which is supplied with power and wherein the circuit 114 is an I/O cell 114a and 114b installed around a semiconductor tip 112 (fig. 4). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Takizawa by having the the contact is attached to an end of the second power line and an I/O cell installed around a semiconductor tip, as taught by AAPA (figs. 3-4), in order to effectively eliminate noise on the power lines for the semiconductor package (page 4, lines 17-19).

- Regarding claim 4, it would have been obvious to one having ordinary skill in the art to have the contact is made wider than the power line.
- Regarding claim 7, AAPA discloses that the bypass capacitor is a transistor comprising: a gate electrode 101d formed on a semiconductor substrate 101a through a gate insulating film; and source/drain regions 101b and 101c formed on the semiconductor substrate with said gate electrode inserted therebetween;

and said first power line 105 is connected to one of said source/drain regions and said gate electrode of said transistor (fig. 3).

- Regarding claim 8, AAPA discloses the second power line 103 is installed in an upper wiring layer than said first power line (fig. 3).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DiLinh Nguyen whose telephone number is (571) 272-1712. The examiner can normally be reached on 8:00AM - 6:00PM (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (571) 272-1705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DLN


LONG PHAM
PRIMARY EXAMINER